

The Jesusita Fire started on May 5, 2009 along the Jesusita Trail above Santa Barbara. The fire ended up burning approximately 8,700 acres above Eastern Goleta and Western Santa Barbara. The fire area map is shown below in Figure 1.

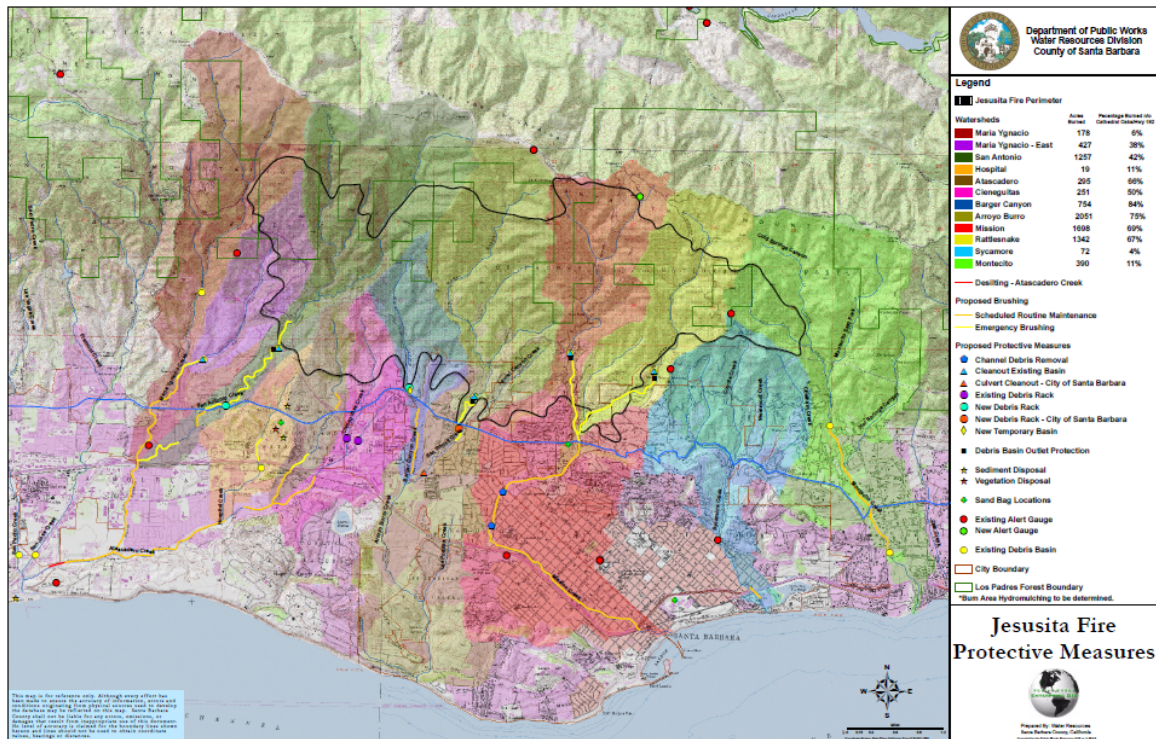


Figure 1 – Jesusita Fire Location

The fire burned portions of the following watersheds; Maria Ygnacio, San Antonio, Atascadero / Cieneguitas, Barger Canyon, San Roque, Mission, and Rattlesnake. A small portion of Maria Ygnacio (Main Branch), Hospital, Sycamore, and Cold Springs Creek Watershed also burned, but the percentages are not significant and thus no remediation actions are proposed. A summary of acres burned and proportion of the watershed burned is given in Table 1. Unless otherwise noted, the percent of watershed burned was calculated based on the watershed area above Cathedral Oaks Road /Foothill Road.

Table 1 – Watershed Fire Statistics

Watershed	Acres Burned	Percent of Watershed
Maria Ygnacio (East Branch)	427	38%
San Antonio	1,257	42%
Atascadero	251	50%
Cieneguitas	295	66%
Barger Canyon	754	84%
San Roque	2,051	75%
Mission	1,698	69%
Rattlesnake	1,342	67%

The Santa Ynez Mountains rise steeply from the Coastal Plain to mountain crest elevations of 3,000 to 4,000 ft. Because of the steep terrain, generation and transport of debris and sediment from the mountains to the channels that run through Goleta and Santa Barbara is a major concern. A dramatic increase in winter runoff is expected from the burn area, which is anticipated to exacerbate erosion and lead to increased delivery of woody debris and sediment downstream. In the watersheds of the Jesusita Fire, rocky debris is also a concern.

In past years, woody debris and rock has contributed to flooding in areas downstream of burned watersheds by plugging culverts and channels and causing water to break out of the channel.

Sedimentation rates are expected to be especially high in the years following the Jesusita Fire.

Following each major fire on U.S.D.A. Forest Service (USFS) lands, the USFS prepares a Burn Area Emergency Response Report (BAER Report) to address the impacts of the fire on the burned watersheds, predict the effects of the fire on runoff and erosion, identify values at risk from adverse impacts related to the fire, and make recommendations for mitigation measures that can be carried out on affected federal and non-federal lands.

On non-federal lands, the USFS is precluded from taking any action. The Santa Barbara County Public Works Department has identified a number of initiatives that may be undertaken in these areas to lessen the adverse impacts of the Jesusita Fire. Those initiatives are summarized in this Jesusita Fire Emergency Watershed Response Plan. It is important to note that the severity and extent of the fire and its proximity to urban areas creates a risk to downstream communities that cannot be fully mitigated. This plan proposes to mitigate the risk to the fullest extent possible by the following actions:

- Prepare existing downstream creek channels to convey the maximum flow rate possible;
- Excavate the existing sediment basin at Atascadero Creek (Goleta Slough) in order to begin the season at maximum basin capacity;
- Install debris racks where feasible to intercept woody debris;
- Clean the existing Debris Basins in the affected Watersheds;
- Perform aerial mulching;
- Provide emergency protective measures at selected key locations as identified;
- Operate sand bag stations to provide sand and bags to residents who live within and downstream of the burn area;
- Operate an aggressive winter operations program to maintain capacity in creek channels, debris basins, and the Atascadero Creek sediment basin;
- Prepare locations for disposal of flood debris and sediment;
- Coordinate assistance to private land owners with flood protection measures and erosion control through the Natural Resources Conservation Service; and
- Coordinate efforts and share information among responding and responsible agencies.

Hydromulching of Non-Federal Lands

One fire mitigation measure proposed by the USFS is hydromulching of federal lands within the burn area where slopes have a gradient of between 25% and 60% and burn severities of moderate and high. This work was done after the Gap Fire in 2008. Hydromulching is a treatment of organic mulch with the addition of a tackifier to help bind the mulch in place. The hydromulch is applied by air.

Because the USFS is precluded from carrying out treatments on non-federal lands, the responsibility for any such treatments falls to the Natural Resources Conservation Service (NRCS) in cooperation with a local sponsor. Approximately 75% - 80% of the burn area is located on non-federal lands. Treatment of the non-federal lands offers benefits to downstream areas by slowing runoff and sedimentation yield. County Public Works will take the lead as the local sponsor and has received the cost assistance with the NRCS. Land Owner permission is also required as all of the potential area is private property. Figure 4 is a photo of the application of aerial hydromulch following the Gap Fire in 2008. Approximately 1,000 acres are contemplated for aerial mulching in the Jesusita Fire (non-federal lands).



Figure 4 – Aerial Hydromulching (Gap Fire 2008)